



GUIDELINES AND
METHODOLOGICAL TOOLS
FOR THE IDENTIFICATION
OF NEW EXPANSION AREAS

EXTRA-SMEs A1.2

EXTRA-SMEs
Interreg Europe



European Union
European Regional
Development Fund

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1 Introduction

“Improving policies to boost SME competitiveness and extraversion in EU coastal and rural areas where aquaculture is a driver of the regional economy” (EXTRA-SMEs) is an Interreg Europe project bringing together 9 partners from 7 countries, aiming at achieving expansion of rural and coastal aquaculture SMEs in wider markets for the promotion of their products, through simpler and improved administrative processes, and innovative technologies.

This document is an output of the EXTRA-SMEs project and constitutes the first part of Activity 1.2 “Identifying new products and processes’ potential to improve EXTRA-SMEs internationalisation and extraversion”. The purpose of this activity is to produce an analysis report on new opportunities and areas for expansion in new products and processes for SMEs active in the aquaculture sector in the project’s regions and their potential to improve their internationalisation and extraversion.

The document begins with an outline of the EXTRA-SMEs project, including its aims, the project consortium, as well as additional information about activity A1.2, its expected output and its interdependence with other project activities (Section 2). It continues with an overview of the EU aquaculture sector and the key relevant concepts (Sections 3 and 4). Next the methodological approach is presented, starting with the development of the research questions, the details of sample selection and the administration of the survey’s questionnaires, the formulation of the questionnaires as well as the use of supplementary secondary sources (Section 5). The next sections (Sections 6 and 7) present the set of quality criteria to be followed while conducting the survey as well as the data analysis. Finally, the work plan to be followed by all project partners during activity A1.2 is presented (Section 7).

2 About the EXTRA SMEs Project

The EXTRA-SMEs “Improving policies to boost SME competitiveness and extraversion in EU coastal and rural areas where aquaculture is a driver of the regional economy”, project primarily aims to achieve expansion of rural and coastal SMEs in wider markets for the promotion of their products, through simpler and improved administrative processes, and innovative technologies, by supporting public authorities and assist them to join forces and exchange experiences in order to a) simplify administration b) expand in new markets c) introduce innovative value-added product solutions d) up-skill personnel and e) contribute to resolving conflicts between stakeholder groups.

2.1 Project objectives

EXTRA-SMEs project’s overall goal is to improve the implementation of participating regions’ policy instruments related to the SME competitiveness across the value chain of coastal and rural regional economies with a strong aquaculture component. The project aims to identify and promote experiences and practices for simpler, improved administrative processes, internationalisation and expansion to broader markets, as well as engaging in innovation processes that will act as drivers for the creation of jobs.

EXTRA SMEs aims at:

- Increasing the capacity of regional authorities to effectively implement policies on SMEs entrepreneurial development, internationalisation, and extraversion;
- Identifying innovation pathways and raising awareness on the benefits of modernisation of the aquaculture SMEs value chain; and
- Incentivising investments, outwards-looking entrepreneurship, addressing limited access to finance, lack of knowledge, and inability to expand in wider markets.

2.2 Project partners

The EXTRA SMEs consortium brings together the following 9 partners from 8 regions in 7 different EU countries:

Table 1: Project partners

N°	Country	Partner
1	 GR	Region of Peloponnese (REGPEL)
2	 IT	Liguria Region (LIGURIA)
3	 PL	Northern Chamber of Commerce in Szczecin (NCC)
4	 RO	Bucharest-Ilfov Regional Development Agency (ADR-BI)
5	 FI	Lapland University of Applied Sciences (Lapland UAS)
6	 GR	University of Patras (UPAT)
7	 IE	Western Development Commission (WDC)
8	 IT	Liguria Cluster for Marine Technologies (DLTM)
9	 LT	Public institution National regions development agency (NRDA)

2.3 Project Activity A1.2

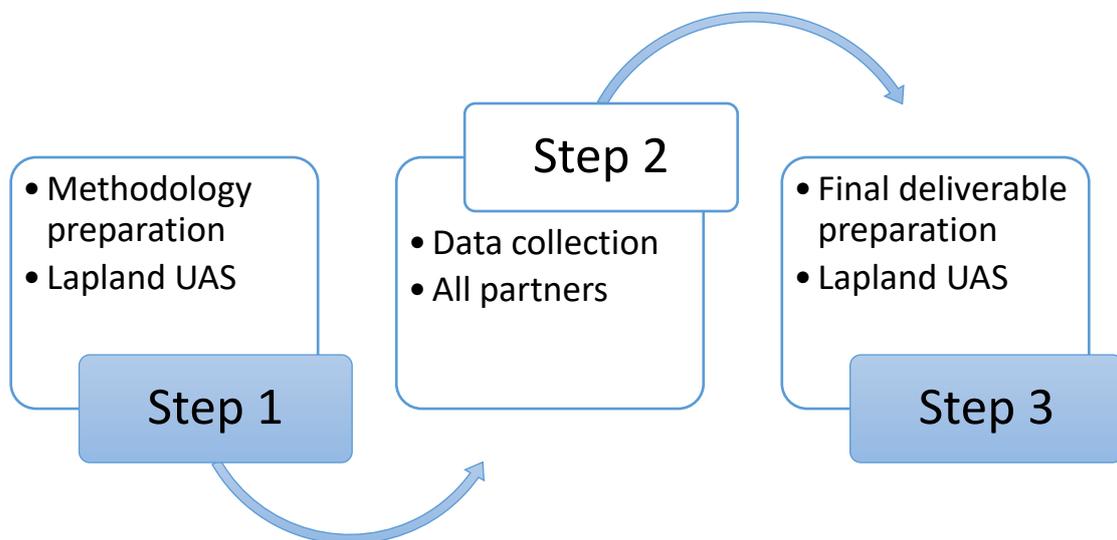
The EXTRA SMEs Activity A1.2 “Identifying new products and processes’ potential to improve EXTRA-SMEs internationalisation and extraversion” entails the identification of new SMEs expansion areas, taking into account regional conditions, attributes and priorities of the EXTRA SMEs partners’ territories. Indicative areas of expansion include a) the development of new product forms; b) the integration of standardised production procedures; and c) the identification of new markets.

As leader of the EXTRA SMEs Activity A1.2, Lapland University of Applied Sciences, upon providing guidelines and methodological tools for the identification of new expansion areas, will coordinate, gather, and examine partners’ contributions, alongside project results and carry out synthesis and analysis on new opportunities and areas for expansion in new products

and processes in the aquaculture sector in the EXTRA SMEs regions and it will correspondingly feed the development of the action plans. The analysis will conclude with the identification of new opportunities and areas for expansion in new products and processes for SMEs active in the aquaculture sector in the project's regions and their potential to improve their internationalisation and extraversion.

The results of activity A1.2 will be integrated into policy briefs on lessons learned (in activity A4.2) and will be further capitalised by adding to an input paper for the facilitation of planning a number of experience exchange visits (in activity A3.5).

Figure 1: Activity A1.2 Work plan



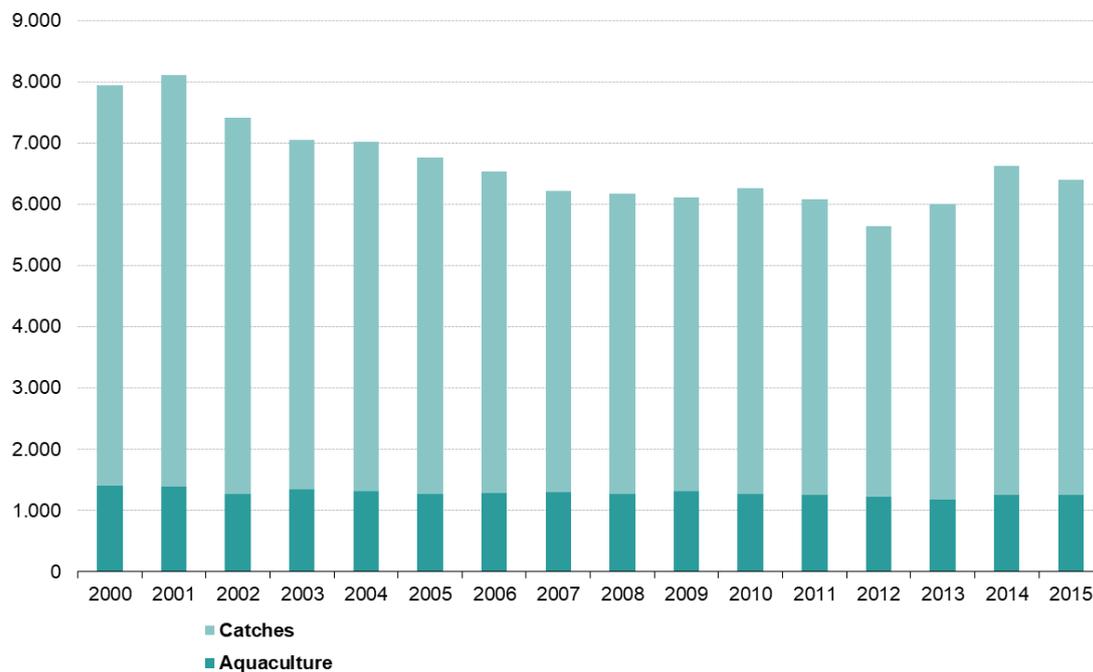
3 Background Information and Key Concepts

Worldwide, aquaculture is growing rapidly, and is expected to overtake capture fishing just as animal husbandry once replaced hunting. This strong trend presents a significant opportunity for development, and a challenge for increasing competitiveness in an environmentally and economically sustainable way.

3.1 An Overview of the EU Aquaculture Production

The aquaculture production in EU28 has increased by 15% since the 1990's. After 2000 the EU's aquaculture sector appears to have reached a plateau (see Figure 2), yet, as the EU capture fisheries production has been decreasing, aquaculture has increased its share over the seafood market (STECF, 2016). The European Maritime and Fisheries Fund (EMFF) considers sustainable aquaculture development as one of its main priorities of and for the 2014-2020 period, roughly 20% of its funding is planned to be invested in the aquaculture sector¹.

Figure 2: Evolution of total production of fishery products, EU-28, 2000-2015²



Source: Eurostat³

¹ See https://ec.europa.eu/fisheries/cfp/aquaculture/funding_en

² (1 000 tonnes live weight)

³ (fish_ca_main), (fish_aq_q) and (fish_aq2a)

In 2015 EU aquaculture represented 1.2% of the worldwide aquaculture production. In 2015 the value of aquaculture production amounted to EUR 4 billion and its volume was estimated at 1.3 million tonnes⁴. Five countries⁵ were responsible for nearly three quarters of the EU28 aquaculture production in both volume and value during the same year. Italy and Greece were among the major producers representing 11.8 % and 8.4 % of the EU aquaculture production in terms of volume and 10.6 % and 11.2 % in terms of economic value correspondingly.⁶

Table 2: Aquaculture production by weight and by value, 2015

Country	Aquaculture production weight (TLW)	Share of aquaculture in total fisheries (%)	Aquaculture production value (EUR million)
 EU 28	1.259.833	19,7	4.128,4
 GR	105.934	62,2	463,4
 IT	148.139	43,6	437,2
 IE	37.581	13,8	136,5
 PL	33.560	15,2	86,6
 FI	14.879	8,8	49,4
 RO	11.016	69,5	21,8
 LT	4.083	5,3	9,3

Source: Eurostat⁷

⁴ See: https://ec.europa.eu/eurostat/statistics-explained/index.php/Aquaculture_statistics

⁵ Spain, the United Kingdom, France, Greece and Italy.

⁶ See: https://ec.europa.eu/eurostat/statistics-explained/index.php/Aquaculture_statistics

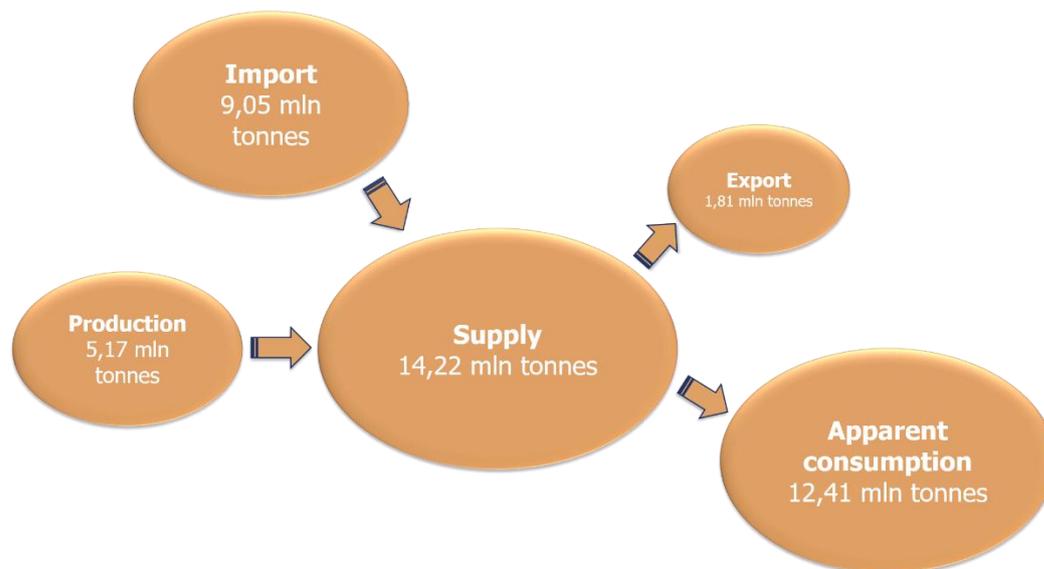
⁷ (fish_ca_main), (fish_aq_q) and (fish_aq2a)

Aquaculture is the rearing of aquatic (freshwater or saltwater) animals or the cultivation of aquatic (freshwater or saltwater) plants under controlled conditions. According to Regulation (EC) No 762/2008, aquaculture production refers to the output from aquaculture at first sale intended for human consumption, thus non-commercial aquaculture, aquaculture production of aquarium and ornamental species and production for industrial, functional or research purposes are excluded and not accounted for. In 2014, finfish and molluscs constituted 98.2 % of the EU aquaculture production (by weight) while the production of crustaceans, algae and other organisms remained small. Over 130 species were farmed in the EU in 2014, yet the 10 most common species made up 90 % of production and 87 % of value of the aquaculture sector.⁸

3.2 Overview Imports, Exports and Consumption at the EU level

According to the European Market Observatory for Fisheries and Aquaculture Products (EUMOFA), based on 2016 data, the EU is a significant market for fish and seafood on a global level as its apparent consumption reached 12,41 million tonnes, corresponding to approximately 24 kg per capita, yet consumption varies greatly across the EU, from 57,0 kg per capita in Portugal to 5,2 kg per capita in Hungary.⁹

Figure 3: EU fish and seafood supply, production, imports, exports and apparent consumption (2016)



Source: EUMOFA¹⁰

⁸ See: https://ec.europa.eu/eurostat/statistics-explained/index.php/Aquaculture_statistics

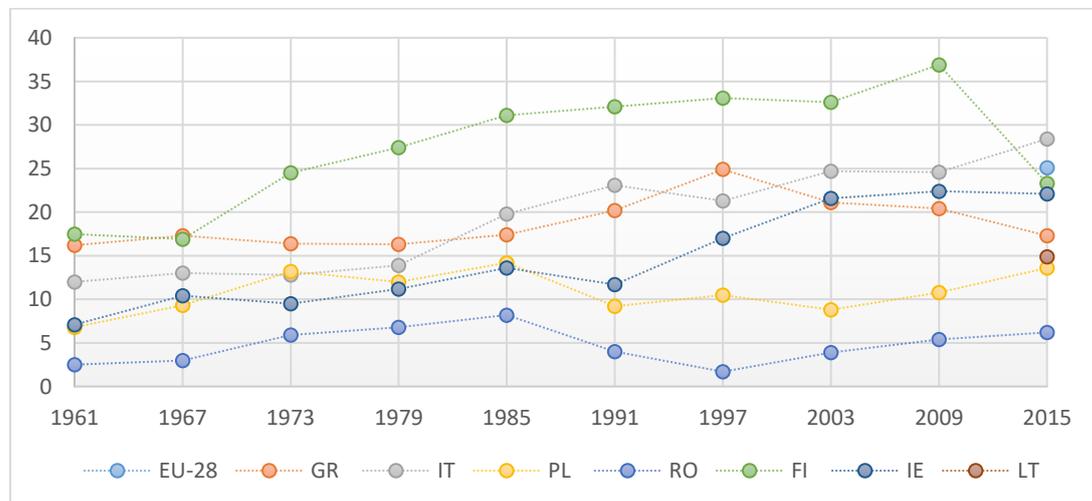
⁹ See: <http://www.eumofa.eu/the-eu-market#euFishMarket>

¹⁰ The Graph is available at: <http://www.eumofa.eu/the-eu-market#euFishMarket>

Overall fish consumption in the EU has grown significantly over the years, yet this increase is mainly based on imports as the production by capture and aquaculture remains stable or declines (Bostock et al., 2009)¹¹. During 2016 imports exceeded 9 million tonnes, constituting approximately 60% of the EU total supply. Exports on the other hand reached 1,81 million tonnes.

With regards to the consumers' views on fishery and aquaculture products 34 % of the EU consumers prefer wild products, 8 % prefer farmed products, 31 % have no preference, while 11 % say it depends on the type of product. Sea water products appear to be more popular than fresh water products, with 39 % and 7 % of favourable opinions correspondingly, yet 35 % of the respondents claimed they have no preference, while 11 % stated it depends on the type of product. Some of the factors influencing consumers purchase decisions include Product's appearance (58 %), cost (55 %), origin of the product (42 %), brand or quality label (24 %), being easy and quick to prepare (21 %) and environmental, social or ethical impact (15%).¹²

Figure 4: Development of consumption of fisheries and aquaculture products in selected EU countries in kg/inhabitant/year



Source: FAO, Eurostat and EUMOFA¹³

¹¹ See also Directorate-General for Internal Policies of the Union, 2016 and Figures 2-4.

¹² See: https://ec.europa.eu/fisheries/sites/fisheries/files/docs/publications/2017-fishery-and-aquaculture-products-overview-consumer-habits_en.pdf

¹³ Available at:

https://ec.europa.eu/maritimeaffairs/atlas/maritime_atlas/#lang=EN;p=w;bkgd=5;theme=34:0.8;c=2462182.7607192323,5447091.007273452;z=3 (1961-2009) & https://ec.europa.eu/fisheries/6-consumption_en (2015).

3.3 SMEs in the aquaculture sector

Small and medium-sized enterprises (SMEs) are considered the backbone of Europe's economy as they represent 99% of all businesses across the EU. The European Commission considers SMEs and entrepreneurship as key to ensuring economic growth, innovation, job creation, and social integration in the EU¹⁴.

Small and medium-sized enterprises (SMEs) are defined in the EU recommendation 2003/361. The main factors determining whether an enterprise is an SME are a) the staff headcount and b) either the turnover or balance sheet total. According to the European Commission, the category of small and medium-sized enterprises (SMEs) is made up of enterprises, which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million. Within the SME division, a small enterprise is defined as an enterprise, which employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 10 million. Respectively, a micro enterprise is defined as an enterprise, which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million. Ceilings apply to the figures for individual firms only. A firm that is part of a larger group include staff headcount/turnover/balance sheet data from that group too.

Table 3: SMEs categorisation

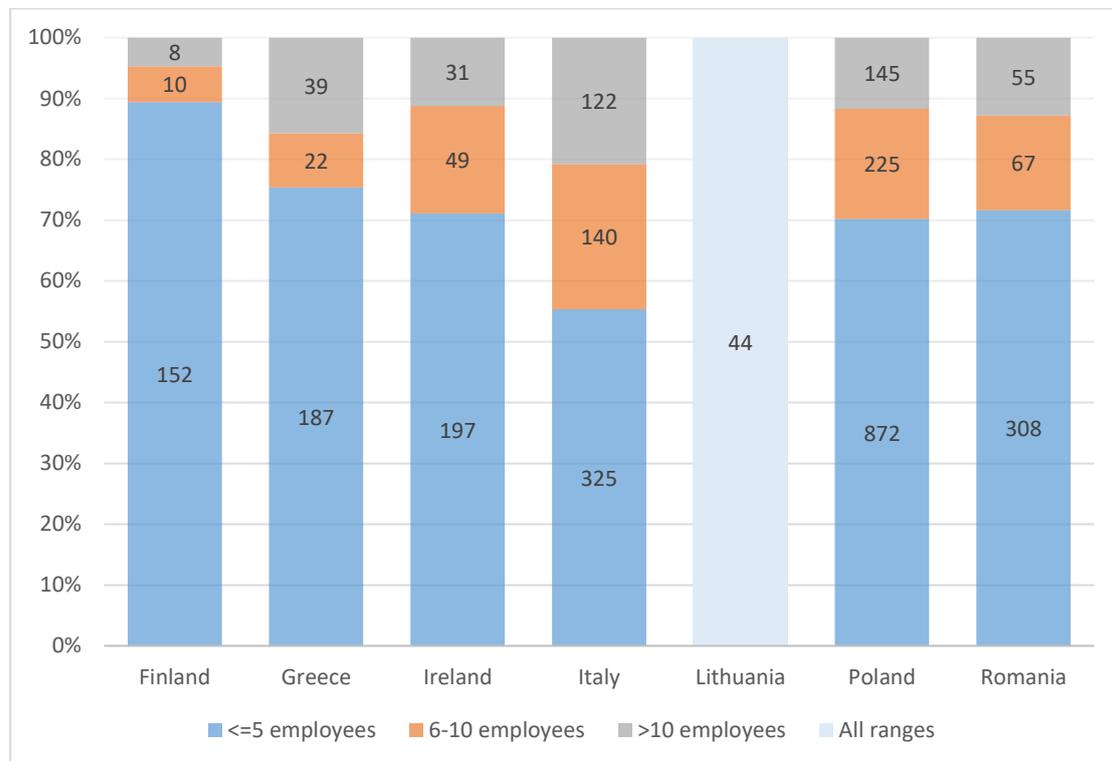
Company category	Staff headcount	Turnover	Balance sheet total
Medium-sized	< 250	≤ € 50 m	≤ € 43 m
Small	< 50	≤ € 10 m	≤ € 10 m
Micro	< 10	≤ € 2 m	≤ € 2 m

The Scientific, Technical and Economic Committee for Fisheries (STECF, 2016) estimates there are between 14,000 and 15,000 aquaculture enterprises in the EU28 and their vast majority (almost 90%) are micro-enterprises, employing less than 10 employees. The number of aquaculture enterprises by range of employees in EXTRA SMEs Countries is presented in Figure 5¹⁵.

¹⁴ See: http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

¹⁵ With the exception of Lithuania where the range of employees is not specified.

Figure 5: Aquaculture Enterprises¹⁶ in EXTRA SMEs Countries by Range of Employees, 2014



Source: EU Member States DCF data submission¹⁷

3.4 Aquaculture value chain

The aquaculture value chain¹⁸, as presented in Figure 6, is formed by five classes of businesses offering both products and services.

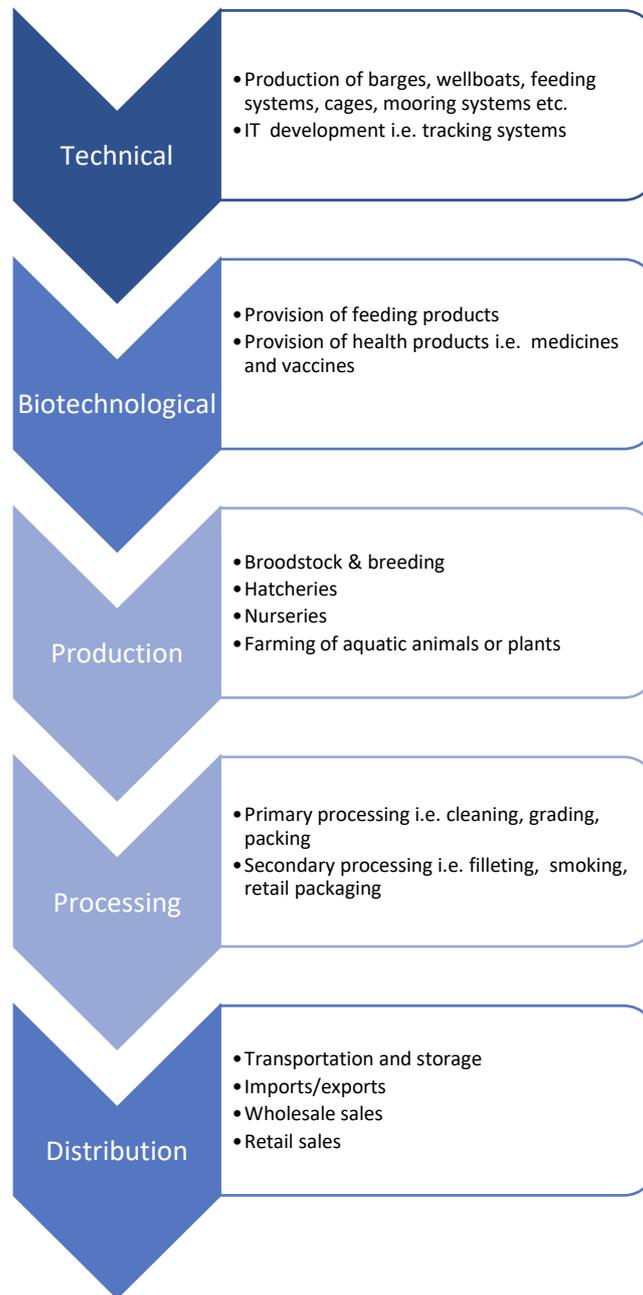
The aquaculture enterprises, whose primary activity is the operation of fish hatcheries and fish farms, are positioned in the middle of the value chain. Enterprises offering technical or biotechnological products and services such as the production and maintenance of feeding systems or cages, the development of tracking systems as well as the provision of feeding and health products and businesses involved in the processing and distribution of aquaculture products are also an integral part of the value chain.

¹⁶ The population refers to enterprises whose primary activity is defined according to the EUROSTAT definition under NACE Code 05.02: Operation of fish hatcheries and fish farms.

¹⁷ In STECF, 2016.

¹⁸ For instance see: [https://www.ey.com/Publication/vwLUAssets/EY_-_The_Norwegian_Aquaculture_Analysis_2017/\\$FILE/EY-Norwegian-Aquaculture-Analysis-2017.pdf](https://www.ey.com/Publication/vwLUAssets/EY_-_The_Norwegian_Aquaculture_Analysis_2017/$FILE/EY-Norwegian-Aquaculture-Analysis-2017.pdf)

Figure 6: The aquaculture value chain



4 Areas of Expansion

Improving competitiveness and extraversion in the aquaculture sector requires support and planning throughout the value chain, as many actors are involved in relevant economic activities at regional level. Furthermore, EU SMEs face international competition from world's regions where industry is subject to lower regulatory requirements. On the other hand, such requirements are at the heart of high-quality production of EU aquaculture and can be the basis of a competitive advantage.

4.1 Approaches for the Internationalisation of SMEs

SMEs' internationalization has been an object of research from various viewpoints. Admittedly "there is not one single path to internationalization". Yener et al. (2014) identify two major approaches explain how firms internationalize: gradual internationalization of firms, mainly represented by the Uppsala models, and rapid internationalization of firms, mainly represented by the Born Global model. The two models present differences with regards to the size of the internationalising businesses, their ways of entry into new markets and the strategies employed over the internationalisation process. Gradual internationalisation is clearly more pertinent in the context of EXTRA-SMEs project.

The initial Uppsala model was developed as a response to previous studies not taking into consideration cultural differences between home and target markets, lack of knowledge on the desires and processes, valid legal issues, and other market specific information of the target markets, and the internal capabilities a firm needs in order to handle its business profitably in the international markets, such as human resources, organizational and financial resources (Yener et al., 2014). The model was considered "the pioneer model in the interpretation of the internationalizing phenomenon as a process of gradual development over time" emphasising on the progressive nature of knowledge obtained through a sequence of steps which mirror a growing commitment to foreign markets (Rialp & Rialp, 2015).

Both Uppsala models regard internationalisation as a gradual step by step process where the internationalising business seeks risk management. The initial Uppsala model offers an internal view of the capabilities and progressive steps of a business towards

internationalisation, receiving criticism for ignoring external factors. The revised Uppsala model (Johanson & Vahlne, 2009) offers a network view, focusing on external aspects. The '77 model viewed the lack of foreign market knowledge as a major constrain for rapid business internationalisation while the '09 model introduced the significance of networking amongst businesses for the internationalisation process (Yener et al., 2014).

Rialp and Rialp (2015) outline the theoretical evolution in this field of internationalisation as encompassing: (1) the analysis of transaction cost and structural market imperfections in the context of FDI; (2) the examination of managerial learning and organizational commitment in the process of international expansion; (3) the consideration of multiple forms of foreign market entry available to the firm; and (4) a more recent approach that recognizes the potential influence of formal and informal networks relationships on internationalization. The authors suggest that by further interrelating the above approaches an integrated, holistic view of the business internationalisation process emerges.

Similarly, Rask (2014) claims that a firm's internationalisation goes hand in hand with business model innovation, which, according to Markides (2006 in Rask, 2014) "is the discovery of a fundamentally different business model in an existing business". Business model innovation is not understood as merely technological innovation but as a "reinvention, of the business itself". Gkypali and Tsekouras (2015) argue that productive performance of innovative firms and their decision to export are endogenously related "due to self-selection" resulting to a dichotomisation of firms into "exporters" and "non-exporters" while the role of innovation patterns is a basis in determining their productive performance and export decision-making. This endogeneity in the decision making process perplexes the relationship between a firm's productive performance and decision to export.

The key components, or building blocks, of a business model identified by the relevant literature (Osterwalder et al. 2005)¹⁹ are:

- **Value proposition** or Product, offering an overall view of the business' products and services.
- **Customer Interface**, including Target Customers, Customer Interface Relationships as well as Distribution Channels.

¹⁹ See also Taran et al. 2015.

- **Infrastructure Management**, including Partner Networks which are to be understood as networks of cooperative agreements with other companies necessary to efficiently offer and commercialize value.
- **Financial Aspects**, including Cost Structure and Revenue Model.

Thus, a business aiming to internationalise its activities should focus on the innovation of its business model by addressing global competition through the innovation of the products and services offered but also through the development of new distribution channels and partner networks.

4.2 Access to information on expansion opportunities

The entrepreneurial process is a complex sequential process that consists of three stages: conception, business establishment and evaluation. The first stage entails the activities leading the entrepreneur to distinguish an existing or new economic opportunity, the second stage involves the decision to realise the opportunity distinguished during the first stage and the actual realisation while during the last stage business performance is evaluated based on the entrepreneur's individual targets and objectives. The success of this endeavour depends on the entrepreneur's characteristics as well as the characteristics of the environment where the endeavour takes place (Stathopoulou et al., 2004).

Opportunity is a central concept within the entrepreneurship field, yet the definition and nature of opportunities are still unclear (Short et al., 2009). Some suggest that entrepreneurs use their cognitive frameworks, developed by experience, to distinguish links between seemingly unrelated developments (e.g. in technological developments, policy changes, market trends) (Baron, 2006). Others consider alertness, "consisting of three distinct elements: scanning and searching for information, connecting previously-disparate information, and making evaluations on the existence of profitable business opportunities" as key in identifying opportunities (Tang et al., 2012).

Based on the above, access to knowledge and information is vital for the development of opportunities. Both formal and informal sources of information can support entrepreneurs identify new opportunities. Sources of information may include mentors, informal industry networks and participation in professional forums (Ozgen & Baron, 2007).

4.3 Products and processes as drivers for expansion

Based on the preliminary desk research, there are various areas where aquaculture SMEs can expand in terms of products and processes in order to achieve the internationalization and extraversion of their products²⁰. The main areas identified are:

Example 1: In the mid '90s, oversupply caused dramatic declines in the wholesale market price of both wild-caught and farmed salmon, and the industries were under considerable pressure to create changes in the traditional ways that they had marketed salmon to the public. At the time, salmon was considered a high-end product, difficult to prepare at home. Consumers' view changed dramatically when boneless, skinless salmon fillets from Chile were introduced into the U.S. marketplace. Thus, through a combination of the product's **processing and marketing**, consumers started viewing salmon as easy to prepare and affordable thus doubling consumption between 1990 and 1997. (Morrissey & DeWitt, 2013)

1. **Improvement of the production process** of existing species to reduce production costs or increase production volume or quality;
2. **Diversification** through the breeding of new species, taking into consideration the trends and needs of the market;
3. Development of new processes of raw material **processing and maintenance**,
4. Development of new technologies, processes and practices for the **quality assurance and traceability of products**;
5. Participation in **special production schemes**, such as organic²¹ or environmentally and socially responsible²² production, adhering by the relevant standards and receiving the corresponding certifications;
6. Development of **marketing and branding strategies** by, for instance, creating or participating in, or promoting a regional brand name or highlighting the product's nutritional value. The term marketing should be understood as the actions undertaken in order to differentiate a product offered in the market from other similar products offered by the competition. Product differentiation is a strategy widely used by ago-food firms.

²⁰ For instance see: Morrissey and DeWitt (2013) on value-added seafood products and Varadi et al. (2001).

²¹ See https://ec.europa.eu/agriculture/organic/eu-policy/eu-rules-on-production/seaweed-and-aquaculture_en.

²² See <https://www.asc-aqua.org/>.

7. Extension of **distribution channels**.
8. Development of **partner networks**.

The fact that, despite its increasing importance, the aquaculture sector remains a rather small segment of the world agro-food industry, restricts investments for research and technological development for the sector. For example, the development of a poultry vaccine would reasonably be expected to return a much higher profit than a salmonid or a sea bass vaccine (Bostock, 2011).

The competitiveness of the aquaculture industry is inextricably linked with investment in research and innovation that will lead to new differentiated products,

improved production, packaging, distribution or consumption processes. These new products must be still more competitive, by, for instance, being of high nutritional value or of low cost to compete with products from third countries.

The cost of the above ventures could be considerable for SMEs, especially for micro enterprises that appear to form the majority of the aquaculture sector in the EXTRA-SMEs regions. This, however, can be redressed by the formation of synergies, for instance through the formation of producer cooperatives (Bostock et al., 2009).

While acknowledging the potentials of innovation synergies, the fact that such cooperation may result in either a positive or a negative innovation performance should also be acknowledged. It has been argued that the benefits of gaining access to knowledge from diverse external sources may be overshadowed by the costs linked to accessing increasingly diverse knowledge through collaboration and a “negative network effect on firms' internal innovation efforts” (Gkypali et al, 2017). A firm’s absorptive capacity, defined by Cohen and Levinthal (1990) as “the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends” has a positive correlation to its innovation and

Example 2: The Trote and Salmerino del Trentino are registered as products of Protected Geographical Indication (PGI) since 2013, thus achieving **product differentiation**.

The products’ expansion of sales was favored by participation and visibility at Expo 2015, where the producers accomplished contacts with wholesalers for the markets of Lombardy, Piedmont and Switzerland and, above all, agreements for the presence of the products in Eataly stores, the chain of Italian products in the world, and in large retail chains, thus expanding their **distribution channels**.

See:

<http://ec.europa.eu/agriculture/quality/door/registerName.html?denominationId=5662>,

<http://ec.europa.eu/agriculture/quality/door/registerName.html?denominationId=5601> and

<https://www.agrisi.it/en/news/trote-e-salmerini-del-trentino-igp-patrimonio-da-15-milioni/>

exporting performance (Gkypali et al, 2018). This calls for policy measures to facilitate the diversification of types of R&D collaborators by reducing the associated cost, addressing the needs of firms exhibiting low absorptive capacity.

5 Methodological approach

The main source of data selected for the purposes of activity A1.2 is questionnaire survey. The survey will be conducted using two structured questionnaires as respondents will belong to two distinct categories: representatives of aquaculture SMEs and institutional stakeholders. The survey data will provide insights on experience-based views with regards to aquaculture SMEs expansion areas.

5.1 Development of the research questions

The research questions were formulated following a desk research on the topic at hand, the key points of which were presented in the previous sections. Specifically, the research questions were formulated under the following conditions:

- The research questions should be of interest to the EXTRA-SMEs partners and helpful to accomplish the objectives of the current research;
- The research questions should provide a direction to the research;
- The research questions' importance should be clear, i.e. it should be obvious why answering the questions is important;
- The research questions should be formulated after considering the path the answer might take;
- The research questions should remain within the EXTRA-SMEs partners' ability to tackle; and finally
- The research questions should be formulated after considering the kind of data sources will be needed in order to develop an answer.

As explained in the first section, the aim of Activity A1.2 is to identify new expansion areas for SMEs in the aquaculture sector, taking into consideration regional conditions, attributes and priorities. Following the thematic overview of the previous chapter, it is possible to define the following research questions:

- What are the key expansion areas identified for aquaculture SMEs in the EXTRA-SMEs regions?
- Which expansion areas are considered more effective in boosting extraversion and internationalisation?

- How do aquaculture SMEs active in the EXTRA-SMEs regions become aware of expansion opportunities?

5.2 Sample selection and questionnaire administration

During the data collection all EXTRA SMEs partners should use their contacts to ensure the participation in the survey of stakeholders from the entire spectrum of the aquaculture industry. Potential respondents can be distinguished in two broad categories:

- **SMEs representatives**, including decision-makers, owners, administrative managers, marketing managers, operations managers, sales administration managers or other staff of aquaculture SMEs with industry knowledge and experience, and
- **Institutional stakeholders**, including representatives of regional or local public authorities, professional bodies, chambers of commerce, innovation centres, higher education and research institutions.

The target respondents will be selected through purposive sampling which is a non-probability form of sampling aiming at selecting participants in a strategic way, tailored to the research questions being posed (Bryman, 2012).

In order to obtain all the necessary data for the analysis, we expect to have completed 10 questionnaires by SME representatives²³ and 5 questionnaires by institutional stakeholders in each of the EXTRA-SMEs regions. For this purpose, each project partner is expected to initially compile a list of relevant stakeholders, and distribute the questionnaire to the stakeholders making sure that the targets are met.

The questionnaires will be available via Google Forms²⁴, and the prospective respondents will be contacted by an e-mail, explaining the purposes of the study and providing a link to the corresponding questionnaire. Alternatively, the questionnaire may be sent to the potential respondents by e-mail. The main advantages of web and e-mail surveys compared to a face-

²³ Except for Lithuania where a smaller number of SME respondents would be sufficient due to the small number of aquaculture SMEs active in the country (see Figure 5).

²⁴ The SMEs representatives questionnaire is available at: https://docs.google.com/forms/d/e/1FAIpQLSd2R9Q27VY6w8d5LVz_0zOvVeNIwse-a1Mg8kVllxVKP7dffQ/viewform?vc=0&c=0&w=1 and the Institutional stakeholders questionnaire is available at: <https://docs.google.com/forms/d/e/1FAIpQLSfCnuZ9kd-30-e7db9z6DLPT7BBvBAH8mFeTcQzKZwDNDLYcQ/viewform?vc=0&c=0&w=1>.

to-face interview, telephone interview, and postal questionnaire surveys include low cost and speed.

A web survey can have important advantages over the email survey, not only in terms of appearance but also due to the way and sequence of the questions' appearance. For instance, respondents can be directed to the appropriate "next question" based on their previous answers (if yes/if no). Yet it must be pointed out that if the project partners face difficulties in meeting the response targets, they may use other means of completing the questionnaires (by mail, by phone or face to face). At this point it should be noted that experiments show that there are no significant variations in the collected data attributed to the data collection method (Bryman, 2012).

5.3 Development of the questionnaires

The questionnaires to be answered by both target groups have been created based on the themes and research questions at hand. Thus, number of precautions have been taken, in order to guarantee that the collected data remain unbiased and relevant:

1. The questionnaire should be based primarily on the research questions

Questions therein aim to collect data relevant to the objectives of this research and cover all the research questions set in section 3.1.

2. The questionnaire should take into consideration the results of the initial desk research

The questionnaire has been formed according to the results of the initial desk research. However, additional questions could be added if partners believe that important aspects are not covered by the existing questionnaire.

3. The type of question that is best suited to answer the research questions should be determined

There are many different types of questions that are suited to meet the requirements of distinct types of analyses. For example, there are open-ended text questions, dichotomous, multiple choice, rank order, scaled, or constant sum (ratio scale) questions (Bryman, 2012).

4. The development of unbiased questions

Questions should be unbiased, i.e. they should not lead respondents to answer them in specific ways, either due to the researchers' interests or due to accidental reasons.

5. The creation of a smooth and unbiased sequence for the questions

The order in which questions are distributed in a questionnaire should not be random. In contrast, questions should be grouped in order to a) ease the respondents' transition from

one question to the next, thus increasing the chances of them completing the questionnaire, and b) make certain that questions asked do not bias the results of the next questions.

Both EXTRA-SMEs A1.2 questionnaires can be found in Annex²⁵. Both questionnaires include scaled questions and multiple-choice questions as well as open-ended text questions.

EXTRA-SMEs partners are advised to provide feedback on the questionnaires and add further questions if deemed necessary. Lapland UAS will examine the compatibility of the suggested questions with the themes and objectives of this research and will advise EXTRA-SMEs partners whether they can be embedded to the questionnaire.

5.4 Use of secondary sources

Desk research on secondary sources will be used to supplement the survey data while drafting the Analysis report. The following table includes scientific journals that could be used as main sources of data beyond the results of the survey.

Table 4: Relevant Journals

Title	Link
Aquaculture International	https://link.springer.com/journal/10499
Aquaculture	https://www.journals.elsevier.com/aquaculture
Journal of Aquaculture Research & Development	https://www.omicsonline.org/aquaculture-research-development.php
Journal of Small Business and Enterprise Development	https://www.emeraldinsight.com/journal/jsbed?expanded=6
Aquaculture and Fisheries	https://www.sciencedirect.com/journal/aquaculture-and-fisheries/vol/3/issue/5
Journal of Fisheries and Aquaculture Development	https://www.gavinpublishers.com/journals/journals_details/journal-of-fisheries-and-aquaculture-development-ISSN-2577-1493
Journal of Business Venturing	https://www.journals.elsevier.com/journal-of-business-venturing
International Journal of Entrepreneurial Behaviour & Research	https://www.emeraldinsight.com/journal/ijebr

The above list is not exhaustive and data from other sources may be included if they are deemed more relevant.

²⁵ Annex 1 presents EXTRA-SMEs A1.2 - SMEs Questionnaire while Annex 2 presents EXTRA-SMEs A1.2 – Institutional Stakeholders Questionnaire.

Another type of secondary sources that can be used during desk research are the results of relevant EU funded projects. Indicative relevant projects are included in the following table.

Table 5: Relevant EU projects

Acronym	Full Title	Link
DIVERSIFY	Exploring the biological and socio-economic potential of new/emerging candidate fish species for expansion of the European aquaculture industry	https://www.diversifyfish.eu/
IDREEM	Increasing Industrial Resource Efficiency in European Mariculture	http://www.idreem.eu/
OrAqua	Recommendations for a future European regulation on organic aquaculture	http://www.oraqua.eu/
SUCCESS	Strategic Use of Competitiveness towards Consolidating the Economic Sustainability of the European Seafood sector	http://www.success-h2020.eu/
ParaFishControl	Advanced Tools and Research Strategies for Parasite Control in European farmed fish	http://www.parafishcontrol.eu/
ARRAINA	Advanced Research Initiatives for Nutrition & Aquaculture	http://www.rraina.eu/
Aquaspace	Ecosystem Approach to making Space for Aquaculture	http://www.aquaspace-h2020.eu/
FISHBOOST	Boosting European aquaculture by advancing selective breeding to the next levels	http://www.fishboost.eu/
AQUAEXCEL²⁰²⁰	AQUAculture infrastructures for EXCELlence in European fish research towards 2020	https://aquaexcel2020.eu/
PerformFISH	Integrating Innovative Approaches for Competitive and Sustainable Performance across the Mediterranean Aquaculture Value Chain	http://performfish.eu/

6 Performance Indicators

Conducting a research using a structured questionnaire survey is a procedure that needs to follow a set of quality criteria, or key performance indicators. If those criteria are not met during data collection the quality of the data may be compromised.

The quality criteria that need to be met during data collection are both quantitative and qualitative. The following table presents the key performance indicators to be followed by each project partner in activity A1.2.

Table 6: Key Performance Indicators

Quantitative KPIs	<ul style="list-style-type: none"> • Minimum number of survey questionnaires completed by SME representatives: 10 • Number of survey questionnaires completed by institutional stakeholders (representatives of regional or local public authorities, professional bodies, chambers of commerce, innovation centres, higher education and research institutions): 5
Qualitative KPIs	<ul style="list-style-type: none"> • Data collection is performed through the use of two questionnaires in order to assure that: • Data collected are relevant to the research questions of the enquiry • Data are provided in a form that can be compared • Data are provided in a form that can be synthesised for the final deliverable of the enquiry • Conclusions derived from the data form a rigorous and coherent narrative to avoid significant contradictions

7 Data analysis

Upon the collection of the questionnaires, the compiled data will be validated and consolidated, based on the key performance indicators defined in the previous section. Data validation refers to the process of determining whether information gathered during the process of data collection is complete and accurate. Responses that do not meet the criteria/requirements will not be taken under consideration. To consolidate data, information needs to be merged by combining the large amount of data into a single, persistent data source (e.g. one large worksheet) that will reflect all the collected input from survey respondents.

Statistical computations and analyses assume that the variables have a specific level of measurement and are properly defined. For the purposes of this survey and following the questionnaire structure, variables will be defined as nominal or interval to avoid nonsensical results.

The Microsoft Excel program can be used to process collected data for survey analysis. A pivot table data summarization tool can be used to automatically sort and combine data and return descriptive statistics and frequencies of the predefined data fields.

Simple statistical methods should be applied to summarize and evaluate the findings. By matching similar data, the raw data will be grouped into categories. To best summarize the data, the mean for each of the quantifiable questions in the questionnaire will be calculated. Findings can be visualized using graphs, particularly bar charts, line charts and pie charts. For the open-ended non-quantifiable questions, similar data will be matched until qualitative patterns are identified.

8 Time-plan for the data collection

The methodology report, including the structured questionnaires, will be circulated by Lapland UAS on the 20th of February 2019. The project partners will be expected to provide feedback on the structured questionnaires within one week after the circulation of the document. Partners' comments and feedback will be integrated into the final methodology report by the 1st of March 2019.

Each project partner will be expected to translate the questionnaires in their country's official language and compile a list of potential respondents and their contact details by the 5th of March 2019. The deadline for collecting data through the questionnaires is the **15th of April 2019**. The responses are expected to be translated into English by the project partners by the above date.

At the next stage, Lapland UAS will proceed with the processing and analysis of the data as well as the additional desk research. The analysis report on new products and processes' potential to improve EXTRA-SMEs internationalization and extraversion will be delivered by Lapland UAS by the 30th of April 2019.

Table 7: Chart of implementation for EXTRA-SMEs Activity A1.2 "Analysis of new products and processes' potential to improve EXTRA-SMEs internationalization and extraversion"

Steps of activity A1.2	Months	Feb 19	Mar 19	Apr 19
	Partners			
Methodology to identify new SMEs expansion areas (draft)	Lapland UAS			
Review of the methodology and structured questionnaire	All partners			
Final version of methodology and questionnaires	Lapland UAS			
Data collection on EXTRA-SMEs regions	All partners			
Analysis report	Lapland UAS			

9 References

- Baron, R.A. (2006). Opportunity Recognition as Pattern Recognition: How Entrepreneurs “Connect the Dots” to Identify New Business Opportunities. *Academy of Management Perspectives* Vol. 20, No. 1, <https://doi.org/10.5465/amp.2006.19873412>
- Bostock, J. (2011). The application of science and technology development in shaping current and future aquaculture production systems. *The Journal of Agricultural Science*, 149(S1), 133-141. doi:10.1017/S0021859610001127
- Bostock, J., Murray, F., Muir, J., Telfer, T., Lane, A., Papanikos, N., Papegeorgiou, P., Alday-Sanz, V. (2009). European aquaculture competitiveness: limitations and possible strategies. European Parliament, Committee on Fisheries
- Bryman, A. (2012). *Social Research Methods*. 4th ed., Oxford, UK: Oxford University Press
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35(1), 128. doi:10.2307/2393553
- Directorate-General for Internal Policies of the Union (2016). Research for PECH Committee. Small-scale fisheries markets: value chain, promotion and labelling - Study. European Parliament, Policy Department B: Structural and Cohesion Policies, ISBN 978-92-823-9127-3 doi:10.2861/965 QA-01-16-401-EN-N
- Geissdoerfer, M., Savaget, P., & Evans, S. (2017). The Cambridge Business Model Innovation Process. *Procedia Manufacturing*, 8, 262–269. doi:10.1016/j.promfg.2017.02.033
- Gkypali, A., Arvanitis, S. & K. Tsekouras, K. (2018). "Absorptive capacity, Exporting Activities, Innovation Openness and Innovation Performance: A SEM approach towards a unifying framework". *Technological Forecasting & Social Change*, 132, 143-155
- Gkypali, A., Filiou, D. & Tsekouras K. (2017). "R&D Collaborations: Is diversity enhancing innovation performance?". *Technological Forecasting and Social Change*, 118, 143-152
- Gkypali, A. & Tsekouras, K. (2015). "Productive performance based on R&D activities of low-tech firms: an antecedent of the decision to export?" *Economics of Innovation and New Technology*, 24, 801-828.
- Lane A, Hough C, Bostock J (2014). The long-term economic and ecologic impact of larger sustainable aquaculture. Study for the European Parliament, Directorate General for Internal Policies, Policy Department B, Structural and Cohesion Policies—Fisheries. [http://www.europarl.europa.eu/RegData/etudes/STUD/2014/529084/IPOL_STU\(2014\)529084_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2014/529084/IPOL_STU(2014)529084_EN.pdf)
- Osterwalder, A., Pigneur, Y. & Tucci, C. L. (2005) "Clarifying Business Models: Origins, Present, and Future of the Concept," *Communications of the Association for Information Systems*: Vol. 16, Article 1. Available at: <http://aisel.aisnet.org/cais/vol16/iss1/1>

- Ozgen, E., Baron, R.A. (2007). Social sources of information in opportunity recognition: Effects of mentors, industry networks, and professional forums, *Journal of Business Venturing*, Volume 22, Issue 2, 2007, Pages 174-192, ISSN 0883-9026, <https://doi.org/10.1016/j.jbusvent.2005.12.001>.
- Rask, M. (2014). Internationalization through business model innovation: In search of relevant design dimensions and elements. *Journal of International Entrepreneurship*, 12(2), 146–161. doi:10.1007/s10843-014-0127-3
- Rialp, A., & Rialp, J. (n.d.). Conceptual frameworks on SMEs' internationalization: Past, present and future trends of research. *Reassessing the Internationalization of the Firm*, 49–78. doi:10.1016/s1474-7979(01)11016-1
- Scientific, Technical and Economic Committee for Fisheries (STECF) (2016). Economic Report of the EU Aquaculture Sector (EWG16-12). Publications Office of the European Union, Luxembourg; EUR 28356 EN; doi:10.2788/677322. Available at: <https://stecf.jrc.ec.europa.eu/documents/43805/1491449/STECF+16-19+-+EU+Aquaculture.pdf>
- Short, J. C., Ketchen, D. J., Shook, C. L., & Duane Ireland, R. (2010). The Concept of "Opportunity" in Entrepreneurship Research: Past Accomplishments and Future Challenges. *Journal of Management*, 36(1), 40–65. <https://doi.org/10.1177/0149206309342746>
- Stathopoulou, S., Psaltopoulos, D., Skuras, D. (2004). "Rural entrepreneurship in Europe: A research framework and agenda", *International Journal of Entrepreneurial Behavior & Research*, Vol. 10 Issue: 6, pp.404-425, <https://doi.org/10.1108/13552550410564725>
- Tang, J., Kacmar, K.M., Busenitz, L. (2012). Entrepreneurial alertness in the pursuit of new opportunities. *Journal of Business Venturing*, Volume 27, Issue 1, 2012, Pages 77-94, ISSN 0883-9026, <https://doi.org/10.1016/j.jbusvent.2010.07.001>. Available at: <http://www.sciencedirect.com/science/article/pii/S0883902610000686>
- Taran, Y., Boer, H., & Lindgren, P. (2015). A Business Model Innovation Typology. *Decision Sciences*, 46(2), 301–331. doi:10.1111/deci.12128
- Varadi, L., Szucs, I., Pekar, F., Blokhin, S. & Csavas, I. 2001. Aquaculture development trends in Europe. In R.P. Subasinghe, P. Bueno, M.J. Phillips, C. Hough, S.E. McGladdery & J.R. Arthur, eds. *Aquaculture in the Third Millennium*. Technical Proceedings of the Conference on Aquaculture in the Third Millennium, Bangkok, Thailand, 20-25 February 2000. pp. 397-416. NACA, Bangkok and FAO, Rome.
- Yener, M., Dođruođlu, B., & Ergun, S. (2014). Challenges of Internationalization for SMEs and Overcoming these Challenges: A Case Study from Turkey. *Procedia - Social and Behavioral Sciences*, 150, 2–11. doi:10.1016/j.sbspro.2014.09.002

10 Annex 1: EXTRA-SMEs A1.2 - SMEs Questionnaire

EXTRA-SMEs

AQUACULTURE SMEs & AREAS OF EXPANSION



“Improving policies to boost SME competitiveness and extraversion in EU coastal and rural areas where aquaculture is a driver of the regional economy” (EXTRA-SMEs) is an Interreg Europe project bringing together 8 regions from 7 countries, to achieve the expansion of rural and coastal SMEs in wider markets for the promotion of their products, through simpler and improved administrative processes, and innovative

technologies. The project aims to identify and promote experiences and practices for simpler, improved administrative processes, internationalisation and expansion to broader markets, as well as engaging in innovation processes that will act as drivers for the creation of jobs.

This form is addressed to aquaculture SMEs and other businesses directly involved in the aquaculture value chain in EXTRA-SMEs territories. The survey aims at identifying new products and processes’ potential to improve internationalisation and extraversion among aquaculture SMEs in the EXTRA-SMEs regions. The analysis and synthesis of the collected data will enable regional stakeholders and administration personnel identify new growth opportunities for SMEs in the aquaculture sector.

Country	Choose an item.	
Region		
City/Town		
Q1.1	Which of the listed categories best describe your business? (Please check all that apply)	
	<input type="checkbox"/> Technical <input type="checkbox"/> Biotechnological <input type="checkbox"/> Production <input type="checkbox"/> Processing <input type="checkbox"/> Distribution	
Q2	Please describe your business’ main activities and products below.	
Q3	Is aquaculture your business’ main source of income?	Choose an item.
Q4	How many employees does your business have in annual full time equivalent labour units?	Choose an item.
Q5	What is your business’ annual revenue?	Over € 50 m

Q6	In what year was your business established?	
Q7.1	Does your business have any internationally-recognized certification?	Choose an item.
Q7.2	If yes, what type of certification?	Choose an item.
Q8.1	Which of the following is your business' main market?	Choose an item.
Q8.2	In average, what percentage of your business' turnover is generated by sales in foreign markets?	%
Q9.1	During the last three years did your business make any of the following? (Please check all that apply)	
	<input type="checkbox"/> Local Sales <input type="checkbox"/> Regional Sales <input type="checkbox"/> National sales <input type="checkbox"/> Indirect exports within the EU (sold domestically to third party that exports products) <input type="checkbox"/> Direct exports within the EU <input type="checkbox"/> Indirect exports outside the EU (sold domestically to third party that exports products) <input type="checkbox"/> Direct exports outside the EU	
Q9.2	For how many years has your business been undertaking exporting activities?	
Q10	Are you planning to address new markets in the foreseeable future? If yes, please elaborate below.	Choose an item.
Q11	During the last three years, did your business invest on research and development activities, either in-house or by hiring external expertise, excluding market research surveys? If yes, please elaborate below.	Choose an item.
Q12	During the last three years, did this establishment spend on market research, either in-house or contracted with other companies? If yes, please elaborate below.	Choose an item.
Q13.1	During the last three years, has your business introduced any new products and/or processes? If yes, please proceed to questions 13.2 & 13.3.	Choose an item.

Q13.2 Have any of the following been performed by your business during the past three years?

If yes please check the appropriate box.

a. **Improvement of the production process** of existing species to reduce production costs or increase production volume or quality.

b. **Diversification** through the breeding of new species, taking into consideration the trends and needs of the market.

c. Development of new processes of **processing and/or maintenance**.

d. Development of new technologies, processes and practices for the **quality assurance and traceability of products**.

e. Participation in **special production schemes**, such as organic or environmentally and socially responsible production, adhering by the relevant standards and receiving the corresponding certifications.

f. Development of **marketing and branding strategies** by, for instance, creating or participating in, or promoting a regional brand name or highlighting the product's nutritional value.

g. Extension of **distribution channels**.

h. Development of **partner networks** with other businesses.

Q13.3 Please provide examples for your positive responses in the previous questions (Q13.1 & Q13.2)

Q14.1 Are you aware of new expansion opportunities in your industry? Choose an item.

Q14.2 If yes, what are your main sources of information?

Q15.1 Do you collaborate with any of the following stakeholders in your region?

- Regional or local public authorities,
- Professional bodies,
- Chambers of commerce,
- Innovation centers,

-
- Higher education and research institutions
 - Other (please specify)
-

Q15.2 Has your business developed innovation synergies with any of the following?

- Suppliers,
 - Customers,
 - Businesses within the industry,
 - Businesses outside the industry,
 - Higher education and research institutions,
 - Independent Experts,
 - Other (please specify)
-

Q16.1 How would you assess the effectiveness of the following expansion areas with regards to improving the extraversion of your business based on your experience and your general knowledge of the industry?

- a. Improvement of the production process** of existing species to reduce production costs or increase production volume or quality. Choose an item.

 - b. Diversification** through the breeding of new species, taking into consideration the trends and needs of the market. Choose an item.

 - c. Development of new processes of raw material processing and/or maintenance.** Choose an item.

 - d. Development of new technologies, processes and practices for the quality assurance and traceability of products.** Choose an item.

 - e. Participation in special production schemes,** such as organic or environmentally and socially responsible production, adhering by the relevant standards and receiving the corresponding certifications. Choose an item.

 - e. Development of marketing and branding strategies** by, for instance, creating or participating in, or promoting a Choose an item.
-

regional brand name or highlighting the product's nutritional value.

f. Extension of **distribution channels**. Choose an item.

g. Development of **partner networks** with other businesses. Choose an item.

Q16.2 **Could you briefly explain your assessment below?**

Q17 **Please suggest any additional areas of expansion that can contribute to the extraversion of the aquaculture SMEs in your region.**

11 Annex 2: EXTRA-SMEs A1.2 – Institutional Stakeholders Questionnaire

EXTRA-SMEs

AQUACULTURE SMEs & AREAS OF EXPANSION



“Improving policies to boost SME competitiveness and extraversion in EU coastal and rural areas where aquaculture is a driver of the regional economy” (EXTRA-SMEs) is an Interreg Europe project bringing together 8 regions from 7 countries, to achieve the expansion of rural and coastal SMEs in wider markets for the promotion of their products, through simpler and improved administrative processes, and innovative

technologies. The project aims to identify and promote experiences and practices for simpler, improved administrative processes, internationalisation and expansion to broader markets, as well as engaging in innovation processes that will act as drivers for the creation of jobs.

This form is addressed to representatives of organisations relevant to the aquaculture, including representatives of regional or local public authorities, professional bodies, chambers of commerce, innovation centres, higher education and research institutions, in EXTRA-SMEs territories. The survey aims at identifying new products and processes’ potential to improve internationalisation and extraversion among aquaculture SMEs in the EXTRA-SMEs regions. The analysis and synthesis of the collected data will enable regional stakeholders and administration personnel identify new growth opportunities for SMEs in the aquaculture sector.

Country Choose an item.

Region

City/town

As a representative of which of the following types of organisations/groups would you describe yourself? Choose an item.

Please describe the main activities of your organisation relevant to the aquaculture sector below.

Q1 How many aquaculture SMEs are active in your region?

Q2 How many aquaculture SMEs active in your region have sought your services/support?

-
- b.** **Diversification** through the breeding of new species, taking into consideration the trends and needs of the market. Choose an item.
-
- c.** Development of new processes of raw material **processing and/or maintenance**. Choose an item.
-
- d.** Development of new technologies, processes and practices for the **quality assurance and traceability of products**. Choose an item.
-
- e.** Participation in **special production schemes**, such as organic or environmentally and socially responsible production, adhering by the relevant standards and receiving the corresponding certifications. Choose an item.
-
- e.** Development of **marketing and branding strategies** by, for instance, creating or participating in, or promoting a regional brand name or highlighting the product's nutritional value. Choose an item.
-
- f.** Extension of **distribution channels**. Choose an item.
-
- g.** Development of **partner networks** with other businesses. Choose an item.

Q5.2 **Could you briefly explain your assessment below?**

Q6 **Please suggest any additional areas of expansion that can contribute to the extraversion of the aquaculture SMEs in your region.**
